What is claimed is:

1. A cam mechanism comprising:

a cam ring including at least one cam rib which is formed on a peripheral surface of said cam ring to extend non-linearly; and

a follower ring which is concentric with said cam ring, and includes at least one pair of cam followers which are formed on a peripheral surface of said follower ring to be positioned apart from each other in an axial direction of said follower ring to hold said cam rib between said pair of cam followers,

wherein central positions of said pair of cam followers are offset from each other in a circumferential direction of said follower ring.

2. The cam mechanism according to claim 1, wherein said cam rib is formed on an outer peripheral surface of said cam ring, and said pair of cam followers are formed on an inner peripheral surface of said follower ring.

3. The cam mechanism according to claim 1, wherein said cam rib is formed on an inner peripheral surface of said cam ring, and said pair of cam followers are formed on an outer peripheral surface of said follower ring.

4. The cam mechanism according to claim 1,

wherein said follower ring is molded from synthetic resin, said pair of cam followers being molded to be integral with said follower ring by a common mold.

5. The cam mechanism according to claim 1, wherein said cam ring and said follower ring are elements of a lens barrel, said follower ring being guided linearly along an optical axis of said lens barrel without rotating.

6. The cam mechanism according to claim 5, wherein said lens barrel comprises a linear guide member having at least one linear guide groove for guiding said follower ring linearly along said optical axis without rotating said follower ring, said pair of cam followers being formed on an end of a linear guide projection which is engaged in said linear guide groove.

7. The cam mechanism according to claim 5, wherein said lens barrel serves as a photographing lens.

8. The cam mechanism according to claim 1, wherein said cam rib comprises:

an inclined straight section which extends in a direction inclined to both a circumferential direction of said cam ring and an axial direction of said cam ring, and

a circumferential section which extends in substantially said circumferential direction of said cam

ring.

9. A cam mechanism comprising:

two concentric rings, at least one of which is rotatable relative to the other;

at least one cam rib formed on one of opposed peripheral surfaces of said two concentric rings;

at least one pair of cam followers formed on the other of said opposed peripheral surfaces to hold said cam rib between said pair of cam followers,

wherein central positions of said pair of cam followers are offset from each other in a circumferential direction of said two concentric rings.

10. The cam mechanism according to claim 9, wherein said cam mechanism is incorporated in a photographing lens.